

Abstract of the Disclosure

Disclosed are an apparatus for forward beamforming using a terminal feedback and a method thereof. The base station estimates an angle of arrival (AOA) range of a user signal from reverse link received data and calculates a plurality of beamforming weights steering the estimated AOA range. Then, the base station transmits a user pilot signal by sequentially using the plurality of beamforming weights at different time areas through a control channel to estimate a forward channel conditions. A terminal calculates the user pilot signal power for all fingers at the respective time areas and feeds a time area number corresponding to the greatest power back to the base station. The base station transmits a data channel signal using a beamforming weight corresponding to the time area number fed back from the terminal.